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**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**AMERICAN NATIONAL CAN COMPANY
BELLWOOD, ILLINOIS
ILD 005 142 351**

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

Work Assignment No.	:	C05087
EPA Region	:	5
Site No.	:	ILD 005 142 351
Date Prepared	:	August 25, 1992
Contract No.	:	68-W9-0006
PRC No.	:	009-C05087IL2D
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EPA Region 5 Records Ctr.



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An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all visible SWMUs, identifying evidence of releases, initially identifying potential sampling parameters and locations, if needed, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the American National facility in Bellwood, Illinois. The PA was completed on January 9, 1992. BVWST gathered and reviewed information from Illinois Environmental Protection Agency (IEPA), EPA Region 5 Office of RCRA, and county files, Federal Emergency Management Agency (FEMA), United States Geological Survey (USGS), and National Wetlands

Inventory maps. The VSI was conducted on January 10, 1992. It included interviews with American National facility representatives and a walk-through inspection of the facility. Seven SWMUs and no AOCs were identified at the facility.

Attachment A contains the EPA Form 2070-12 completed by BVWST using information gathered during the PA/VSI. Attachment B summarizes the VSI and includes six inspection photographs. Attachment C contains field notes from the VSI.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

The American National facility is located at 2400 Maywood Drive in Bellwood, Cook County, Illinois (latitude 41° 52' 38" N and longitude 87° 51' 55" W), as shown in Figure 1. The facility occupies 2.67 acres in a mixed use industrial and residential area.

The American National facility is bordered on the north by Maywood Drive and two tracks of the Chicago and Northwestern Railroad, on the west by Sleepeck Printers, on the south by an Indiana Harbor Belt railway spur and residential homes, and on the east by a Handy Andy warehouse.

2.2 FACILITY OPERATIONS

The American National facility manufactures printing plates used for decorating metal cans. Finished plates are used at American National Can Co. production facilities (Braithwaite, 1973).

The facility has operated at its current location since 1959 and employs about 62 people. The facility consists of a small grass lawn along the northern side on Maywood Drive, one 48,700 square-foot brick building, and an asphalt parking lot south of the building. The parking lot is accessed by two single lane asphalt paved driveways adjacent to the eastern and western sides of the building. A chain link fence encloses the parking lot. Remote controlled gates across the parking lot driveways are open at designated times to allow employee access. Access to the parking lot at other times is gained through a gateside phone link to the receptionist or with an employee pass. The entrance to the building is located in the back, accessed from the secured parking lot.

The facility was constructed in 1959 by American Can Co., a New Jersey corporation. In 1986, ownership and operational control of American Can Co. was transferred to American Packaging Inc., a Delaware corporation and wholly-owned subsidiary of Triangle Industries Inc. (Young, 1986). In 1987, American Can Packaging Inc. merged into National Can Corp., another wholly-owned subsidiary of Triangle

Industries Inc. (Rivets, 1987). The resulting corporation changed its name to American National Can Co., which took over ownership and operational control. The merger did not change management or operations at the facility.

Facility SWMUs are identified in Table 1. The facility layout and SWMUs are shown in Figure 2. Although some process technological differences existed in the past, American National performs the same functions it did when the facility was constructed in 1959. Facility operations are divided into an art department and a production department.

The art department develops graphic designs. Customer-approved graphic designs are placed on photographic film (negatives) which are delivered to the production department for transfer of the design to printing plates. No SWMUs were identified in the art department.

All of the waste generated by the art department is nonhazardous and most of it is discarded in the general refuse dumpster. The art department does use a printing press for color proofing. A solvent (roller wash) manufactured by Grafsolve Company is used to clean the press (Reitsma, 1992c). Spent roller wash and trace amounts of ink are bound in wiping rags which are temporarily stored in eight-gallon metal containers with foot pedal-operated, spring-loaded lids (Reitsma, 1992c). Roscoe Uniform and Emblem Company (Roscoe) of Chicago picks up the roller wash soaked rags weekly (Reitsma, 1992c). Roller wash soaked rags are transported by Roscoe as a nonhazardous waste which does not require waste manifesting. Spent roller wash is not handled by any on-site SWMU.

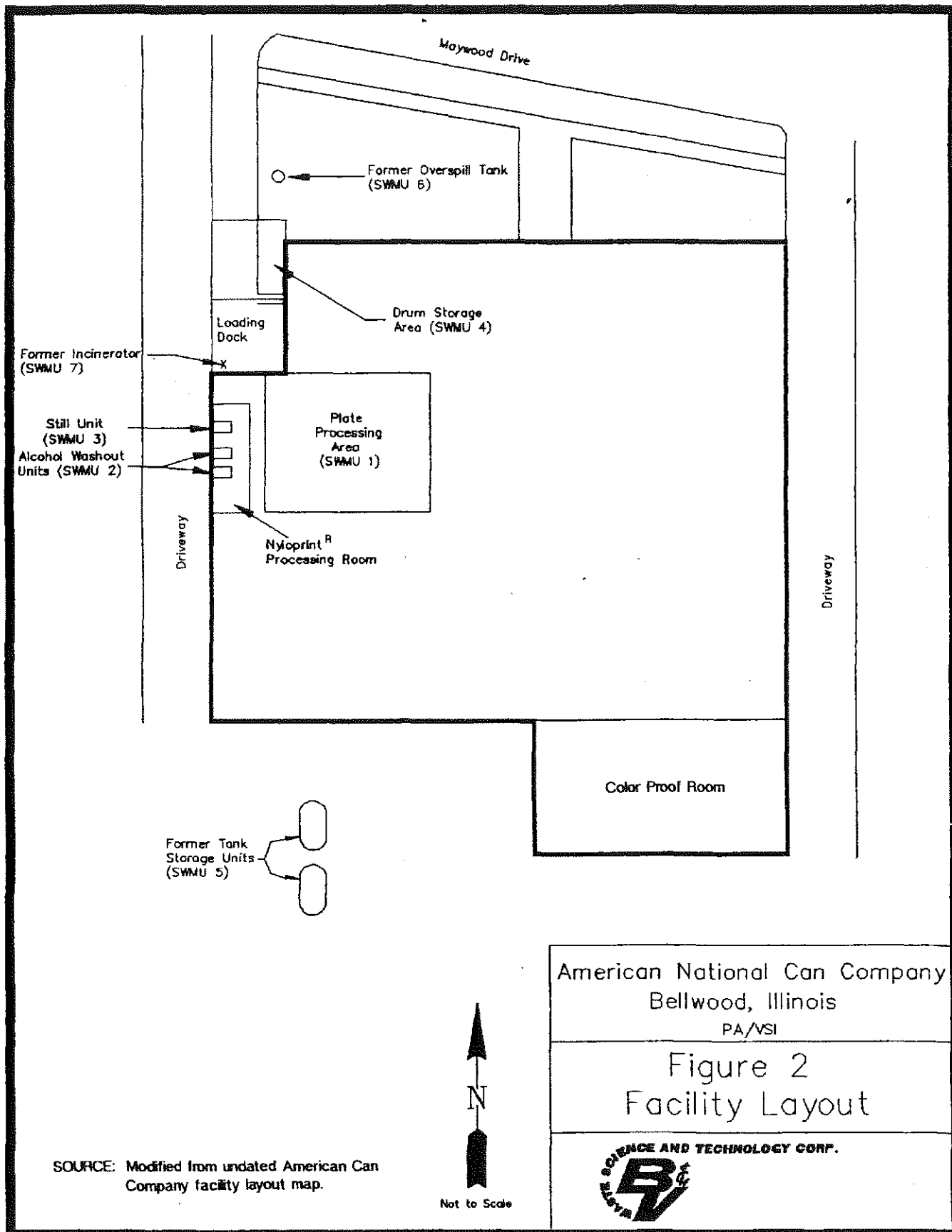
The production department utilizes either the bi-metal or Nyloprint[®] process to impart graphic designs to metal printing plates. Both processes begin with exposing negatives and specially prepared metal plates to high intensity ultraviolet (UV) light in a Rutherford or Misomex photocomposing machine.

In the bi-metal process, copper and chromium coated aluminum plates are treated with a copper sensitizer prior to exposure to high intensity UV light. Exposed plates are taken to the plate processing area (SWMU 1) and put through a developer machine, then an etching machine, and finally a stencil removing machine. After development, the design is etched into the plate in the etching machine, using a metal etchant containing (by weight) 95% ferric nitrate. Spent etch (D002) from this step in the process is the only hazardous waste presently generated in the production department (Printing Developments Inc., 1985a). Nonhazardous wastes generated from the bi-metal process are etching rinse water, spent developer, and spent stencil remover (Printing Developments Inc., 1985b; IEPA, 1989).

TABLE 1
SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Plate Processing Area	No	Active
2	Alcohol Washout Units	No	Active
3	Still Unit	No	Active
4	Drum Storage Area	Yes	RCRA closure 1990, active for less-than-90- day storage
5	Former Tank Storage Units	Yes	Closed
6	Former Overspill Tank	Yes	Closed
7	Former Incinerator	No	Inactive

Note: A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



The Nyloprint ® process uses aluminum plates coated with a photosensitive polymer (photopolymer). Exposure to UV light renders the photopolymer insoluble. By placing the negative between the plate and the UV light source, the design image is cast onto the plate in those areas where high intensity UV light strikes the plate. Exposed plates are taken to the Nyloprint ® processing room. This room contains two Nyloprint ® processor (alcohol washout - SWMU 2) units and a regeneration (still - SWMU 3) unit.

Exposed plates are placed in one of the two alcohol washout units (SWMU 2) where they are washed with a solvent solution of ethyl alcohol (85%) and water (15%). The solvent washes off soluble photopolymer, leaving insoluble photopolymer bonded to the plate in the desired design. Washed plates are transferred to drying cabinets. After they are completely dry the plates are ready for use.

The aqueous photopolymer/solvent solution is transferred from the alcohol washout units (SWMU 2) to the still unit (SWMU 3) for reclamation of the ethyl alcohol. Approximately 85% of the solvent solution (the ethyl alcohol portion) is separated from the aqueous photopolymer and is reused. Facility representatives state that all of the ethyl alcohol is recycled in this manner. Waste aqueous photopolymer is extruded from the still unit (SWMU 3) as a sludge, into a five-gallon cardboard container (cubitainer). Within 48 to 72 hours the photopolymer sludge hardens into an inert solid. The photopolymer is a nonhazardous substance (Toray, 1989). Cubitainers of solid waste photopolymer are discarded in the general refuse dumpster.

Wastes generated from manufacturing processes at the facility are either disposed of in general refuse dumpsters or collected in 55-gallon drums and staged in an indoor drum storage area (SWMU 4) adjacent to the loading dock in the northwest corner of the building. Wastes generated in the plate processing area (SWMU 1) (spent etch (D002), spent stencil remover, spent developer, and etching rinse water) are collected in 55-gallon drums which are transferred to the drum storage area (SWMU 4) for temporary (less-than-90-day) storage. Drummed wastes are picked up for recycling or disposal by vendors. Waste disposition is discussed in Section 2.3.

This facility has four active waste management units: 1) plate processing area (SWMU 1), 2) alcohol washout units (SWMU 2), 3) still unit (SWMU 3), and 4) drum storage area (SWMU 4). Waste drums are filled in the plate processing area (SWMU 1) located in the northwestern section of the building. The drums are then staged in the drum storage area (SWMU 4) for temporary (less-than-90-day) storage. The drum storage area (SWMU 4) is directly north of the plate processing area (SWMU 1), adjacent to the loading dock. Two waste management units, the alcohol washout units (SWMU 2) and the still unit (SWMU 3), are in the Nyloprint ® process room, directly west of the plate processing area (SWMU 1).

Two waste management units at the facility have undergone formal RCRA closure as treatment, storage, or disposal units. The former tank storage units (SWMU 5) consisted of two 4,000-gallon fiberglass underground storage tanks located south of the building, under the present day parking lot. The drum storage area (SWMU 4) remains active, but was modified at the time of the RCRA closure. Prior to RCRA closure, a spill collection system was in place for the drum storage area (SWMU 4). Potential spills in the drum storage area (SWMU 4) would have been routed through a floor drain and pipe to an outdoor, subsurface concrete spill containment basin (overspill tank - SWMU 6). In 1986, the former storage tanks (SWMU 5) were cleaned, disconnected from piping, and filled with water (IEPA, 1989). The overspill tank (SWMU 6) was abandoned and plugged in 1989 (Chernikoft and Kendorski, 1990). The tank storage units (SWMU 5) and the overspill tank (SWMU 6) were removed in 1990 (Chernikoft and Kendorski, 1990).

A gas fired incinerator (SWMU 7) was used to burn plant garbage from 1959 to 1979 (Reitsma, 1992a). The incinerator (SWMU 7) was removed in May 1979 (Reitsma, 1992a).

No planned waste management units exist. The wastes and SWMUs will be discussed in detail in Section 2.3.

A 20,000-gallon steel underground storage tank was buried in the same backfill as SWMU 5 (Chernikoft and Kendorski, 1990). This tank was used to store fuel oil for use in the facility's two boilers (Reitsma, 1992a). The fuel oil storage tank was removed with the tank storage units (SWMU 5) in January 1990 (Chernikoft and Kendorski, 1990). Analysis of soil samples collected from the removal excavation and nearby borings showed analyte concentrations below clean up objectives established by the IEPA (Minder, 1992). As no releases have been documented from this tank and no soil contamination was discovered during the tank removal, it is not designated as an AOC in this report.

2.3 WASTE GENERATING PROCESSES

The primary waste streams generated at the American National facility are: spent etch (D002), etching rinse water, spent developer, spent stencil remover, spent photopolymer, spent roller wash and ink. These wastes are generated during the production of printing plates. Wastes generated at the facility are discussed below and are summarized in Table 2. Except where noted, monthly generation rates are based on 1989 waste generation data (IEPA, 1989).

Printing plate production consists of transferring graphic designs to metal printing plates. This is accomplished by either the bi-metal etching process or the Nyloprint ® process. These processes

TABLE 2
SOLID WASTES

<u>Waste/EPA Waste Code</u>	<u>Source</u>	<u>Primary Management Unit*</u>
Spent Etch/D002	Plate Processing Area	1, 4
Hydrochloric Acid/D002	Plate Processing Area	5
Nitric Acid/D002	Plate Processing Area	5
Etching Rinse Water/NA	Plate Processing Area	1, 4
Spent Developer/NA	Plate Processing Area	1, 4
Spent Stencil Remover/NA	Plate Processing Area	1, 4
Spent Photopolymer/NA	Alcohol Washout Units	2, 3
Towel Wipes/NA	Plate Processing Area	7
Spent Roller Wash/NA	Color Proof Room	None, vendor serviced
Ink/NA	Color Proof Room	None, vendor serviced

Notes:

* Primary management unit refers to a SWMU that currently manages or formerly managed the waste.

** Nonapplicable (NA) designates nonhazardous waste.

generate spent etch (D002), etching rinse water, spent developer, spent stencil remover and spent photopolymer. Cumulatively, about 2,640 gallons of bi-metal process waste and less than 200 gallons of waste photopolymer are generated annually.

Spent etch (D002), etching rinse water, spent developer and spent stencil remover are generated as waste in the bi-metal process. These wastes are generated in the plate processing area (SWMU 1) during the three step process (Reitsma, 1992a). Bi-metal plates which have been exposed to UV light are first put through a developer machine, generating spent developer. Developed bi-metal plates are put through an etching machine which generates spent etch (D002) and etching rinse water. In the final step of the bi-metal process, the plates are run through a stencil removing machine, generating spent stencil remover. Wastes generated in the plate processing area (SWMU 1) are accumulated in labeled 55-gallon drums which are transferred to the drum storage area (SWMU 4) when full. Detailed discussions of SWMUs 1 and 4 are given in Section 3.0.

All drummed wastes are staged along the east wall of the drum storage area (SWMU 4) for less-than-90-day storage. The former overspill tank (SWMU 6) was connected to the drum storage area (SWMU 4) until 1989 (Chernikoff and Kendorski, 1990). No releases to the overspill tank (SWMU 6) have been documented. A detailed discussion of SWMU 6 is given in Section 3.0.

Spent etch (D002) contains 95% ferric nitrate and 5% water (Printing Developments Inc., 1985a). Approximately 100 gallons of spent etch are generated per month (IEPA, 1989). Etching rinse water contains copper in solution (IEPA, 1989). Approximately two drums (110 gallons) of etching rinse water are generated every three months (IEPA, 1989). Both of these waste streams are transported by Hazmat Environmental Group (Reitsma, 1992b) to Enviro in Harvey, Illinois, for recycling (IEPA, 1989).

Spent developer contains 40% diethylene glycol ethyl ether (carbitol), and 60% gamma butyrolactone (organic solvent) (Printing Developments Inc., 1987). Approximately one drum (55 gallons) of spent developer is generated per month (IEPA, 1989). Spent stencil remover contains less than five percent each of sulfuric acid, phosphoric acid, and ferric nitrate in a water matrix (Printing Developments Inc., 1985b). Approximately two drums (110 gallons) of spent stencil remover are generated every three months (IEPA, 1989). Both of these wastes are transported by Hazmat Environmental Group (Reitsma, 1992b) to Printing Developments Inc. in Racine, Wisconsin (IEPA, 1989).

Photopolymer waste is generated in the Nyloprint ® room where the alcohol washout units (SWMU 2) and still unit (SWMU 3) are located. A mixture of solvent solution (85% ethyl alcohol, 15% water) and

soluble photopolymer is generated as waste from the plate washing process in the alcohol washout units (SWMU 2). This waste is pumped to the still unit (SWMU 3) for reclamation of the ethyl alcohol. Facility representatives state that all of the ethyl alcohol is reclaimed in the still unit (SWMU 3). Reclaimed ethyl alcohol is reused in subsequent plate washing operations in the alcohol washout units (SWMU 2). Aqueous photopolymer waste is extruded from the still unit (SWMU 3) as a sludge, into five-gallon cubitainers. Within 48 to 72 hours the photopolymer sludge hardens into an inert solid. A 1989 Material Safety Data Sheet shows that the photopolymer is nonhazardous (Toray, 1989). Waste photopolymer is disposed of in the general refuse dumpster. Waste from the dumpster is hauled to a sanitary landfill by Van Ryan Scavenger Service.

American National maintains an air emissions permit from the IEPA Division of Air Pollution Control, for the operation of the Nyloprint ® printing plate processor (SWMUs 2 and 3) (IEPA, 1989). The current permit will expire in September 1993. Initial application for a permit to construct the Nyloprint ® process was made by American National's predecessor, American Can Company, in 1978 (Hayes, 1978). A permit to operate the Nyloprint ® process was granted by the IEPA in April 1979 (Crawford, 1979). The permit noted that emission of ethyl alcohol from the process would be negligible (Hayes, 1978). Detailed discussions of SWMUs 2 and 3 are given in Section 3.0.

A printing press in the color proof room is periodically cleaned with rags soaked with roller wash (Reitsma, 1992c). Spent roller wash and trace amounts of ink are bound in the cleaning rags. Residual roller wash remaining on the printing press evaporates. Used cleaning rags are immediately containerized in eight-gallon metal cans fitted with foot pedal-operated, spring-loaded lids. Once each week, a linen service (Roscoe) picks up the used rags for washing and redistribution to their customers. Roscoe transports the roller wash/ink soaked rags as a nonhazardous waste that does not require a manifest. The waste is not handled by any on-site SWMU.

Roller wash contains aromatic 100 solvent (50%), mineral spirits (40%), 2-butoxyethanol (8%), and a surfactant (2%) (Grafsolve, 1990). The facility uses approximately 30 gallons of roller wash each month (Reitsma, 1992c). Roscoe transports the rags to their laundry facility in Chicago, Illinois (Reitsma, 1992c).

Ink is referred to as a waste stream in a 1989 IEPA inspection report (IEPA, 1989). Facility representatives stated they are not aware of any significant past or present ink waste stream (Reitsma, 1992c). Trace amounts of waste solvent-base ink are generated in the color proof room, bound with spent roller wash in used cleaning rags. Minute amounts of waste solvent-base ink generated facility wide in

normal daily operations are disposed of in the general refuse (Reitsma, 1992c). No records of waste ink quantities have been maintained (Reitsma, 1992c). Facility representatives stated that all waste ink is nonhazardous (Reitsma, 1992c). Ink bound in roller wash soaked rags is transported each week by Roscoe to their laundry facilities in Chicago, Illinois. General refuse is hauled to a sanitary landfill by Van Ryan Scavenger Service.

In the past, the facility generated hydrochloric acid (HCL) (D002) nitric acid (D002), etchant, and developer waste streams (IEPA, 1989). HCL (D002) and nitric acid (D002) were used as solvents in the bi-metal plate etch process. Etchant and developer are synonymous with the previously discussed spent etch (D002), and spent developer, respectively.

Waste HCL (D002) and nitric acid (D002) were stored in two 4,000-gallon underground tank storage units (SWMU 5) which were emptied once or twice a year by Waste Management Inc. (IEPA, 1983). At the VSI, facility representatives stated the facility no longer generates an HCL (D002) or nitric acid (D002) waste stream, but they were unable to provide a date for cessation of their use at the facility. HCL (D002) and nitric acid (D002) were used as late as 1983 (IEPA, 1983) but were not in use by 1989 (IEPA, 1989). It appears that both acids were no longer in use when the former tank storage units (SWMU 5) were cleaned and disconnected in August 1986. No information is available on the quantity of waste HCL (D002) and nitric acid (D002) generated at the facility. A detailed discussion of SWMU 5 is given in Section 3.0.

A 1977 IEPA facility inspection discovered an operating incinerator (SWMU 7). American National was incinerating paper towel wipes used to clean printing plates and process equipment (IEPA, 1977) and plant garbage (Reitsma, 1992a). A subsequent application for an air emissions permit to operate the incinerator and plate etch process stated the incinerator operated approximately 130 hours annually (McKirahan, 1977). Prior to May 1979, the facility ceased to operate the incinerator (Kambic, 1979) and now disposes of towel wipes in the general refuse, which is transported to a sanitary landfill by Van Ryan Scavenger Service. The incinerator was removed in May 1979 (Reitsma, 1992a). A detailed discussion of SWMU 7 is given in Section 3.0.

2.4 HISTORY OF DOCUMENTED RELEASES

No documented releases to groundwater, surface water, air, or on-site soils have occurred at the American National facility.

In 1986, ownership and operational control of American Can Co. was transferred to American Packaging Inc., a Delaware corporation and wholly-owned subsidiary of Triangle Industries Inc. (Young, 1986). In 1987, American Can Packaging Inc. merged into National Can Corp., another wholly-owned subsidiary of Triangle Industries Inc. (Rivetna, 1987). The resulting corporation changed its name to American National Can Co., which took over ownership and operational control.

American National submitted a notification of hazardous waste activity to EPA on August 4, 1980 (IEPA, 1990). The facility submitted a RCRA Part A permit application on November 17, 1980 (IEPA, 1990). This application listed the following process codes and capacities: SO1, drum storage unit (SWMUs 4 and 6), a 10 feet 8 inch by 25 feet 4 inch room with a floor to ceiling height of 9 feet 11 inches and no specified drum capacity, and; SO2, two 4,000-gallon underground storage tanks (SWMU 5) located beneath the asphalt parking lot at the southern end of the building. Each tank was constructed of fiberglass with 8- by 14-foot dimensions and was in operation from November 1980 to January 1985 (Cadwalader et al., 1988). They were used to store waste HCL (D002) and nitric acid (D002) (IEPA, 1989).

In 1988, American National notified the IEPA of its intention to withdraw the facility's RCRA Part A permit application (Trzyna, 1988). The IEPA acknowledged receipt of a closure plan prepared by Cadwalader, Wickersham & Taft in 1988 (Eastep, 1988). The purpose of the closure was to change the status of the American National facility from that of a hazardous waste storage facility to a small-quantity generator that does not store hazardous waste for more-than-90-days (Cadwalader et al., 1988). Final IEPA approval of the closure plan was granted in February 1990 (Eastep, 1990). On September 18, 1990, American National and an independent registered professional engineer certified that all provisions of the approved closure plan had been completed (Chernikoft and Kendorski, 1990). The facility's RCRA Part A application was formally withdrawn by the IEPA in November 1990 (Savage, 1990).

With the withdrawal of RCRA Part A status, the following RCRA units were formally closed: SO1, drum storage unit, and SO2, tank storage units. Part of the former drum storage unit remains active as the drum storage area (SWMU 4). The spill containment system (former overspill tank - SWMU 6) for the former drum storage unit was abandoned and plugged in August 1989 in accordance with IEPA approved closure plans (Chernikoft and Kendorski, 1990). Two 4,000-gallon fiberglass storage tank storage units (SWMU 5) were closed by disconnecting them from piping, rinsing the tanks, and filling them with water on August 26, 1986 (IEPA, 1989). The former tank storage units (SWMU 5) and former overspill tank (SWMU 6) were removed in January 1990 (Chernikoft and Kendorski, 1990).

In the past, American National has had numerous violations of regulatory requirements. RCRA compliance inspections were conducted by IEPA in January 1977, April 1983, October 1989, and October 1990 (IEPA, 1977; 1983; 1989; 1990). Inspectors noted violations related to the lack of an operating permit for the incinerator (IEPA, 1977); inadequate training records, no spill control equipment, incomplete contingency plan (IEPA, 1983); and no hazardous waste determination for etching rinse water, spent developer, or spent stencil remover, and no copies of test results available (IEPA, 1989). American National responded to the violations with corrective actions. The 1990 IEPA RCRA Part A closure inspection found the facility in RCRA compliance (IEPA, 1990).

American National is required to have an operating air permit for the Nyloprint ® process. The facility does not have a history of air permit compliance problems. The facility has no history of odor complaints from area residents. An air emissions permit (No. C811008) for the operation of the Nyloprint ® printing plate process was originally granted in 1979. The permit allowed ethyl alcohol emissions, which the IEPA stated were negligible (Hayes, 1978). American National maintains a current air permit for the process, which will expire in September 1993.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and groundwater in the vicinity of the American National facility.

2.6.1 Climate

Data from the National Weather Bureau at Chicago's O'Hare Airport indicate an average daily maximum temperature of 58.7°F and an average daily minimum of 39°F. The average annual precipitation from 1958 to 1990 was 33.3 inches, and the greatest 24-hour rainfall was 9.3 inches in August 1987. The overall wind direction varies seasonally with an average wind speed of 10.3 mph (National Weather Bureau, 1991).

2.6.2 Flood Plain and Surface Water

The American National facility's location is classified as a Zone C flood plain area, which is an area of minimal flooding outside the 500-year flood plain (FEMA, 1979). The nearest surface-water body, Addison Creek, flows north to south in a channel less than 0.5 mile west of the facility. The Des Plaines River flows north to south in a channel about 1.75 miles east of the facility. The Des Plaines river may be

used for recreational purposes. Addison Creek is quite small and may not be used for any purposes. The Des Plaines River ultimately discharges to the Chicago Ship and Sanitary Canal.

Surface-water drainage at the facility is collected by storm sewers, and ultimately channeled to the Des Plaines River.

Addison Creek and the Des Plaines River are classified as riverine wetlands (U.S. Department of the Interior, 1981). The headwaters of Addison Creek are in a small palustrine wetland, approximately 1.25 miles northwest of the facility. Palustrine wetlands are also located 1.5 to 2.0 miles east of the facility, in the Des Plaines River floodplain. No other wetlands are within two miles of the American National facility.

2.6.3 Geology and Soils

The soil types over much of Cook County have not been mapped in detail by the U.S. Department of Agriculture because of obscuring urban land use (USDA, 1979). However, their report contains a regional soil map that classifies the soil near American National as nearly level, poorly drained soil resulting from the deposition of clay and silt in a glacial lake.

The sediment and rock occurrence expected at the site is an unknown thickness of unconsolidated sediments originating from Pleistocene glacial action (ponded-water clays, tills, and outwash) overlying bedrock composed of sedimentary rock units of Paleozoic age. No site-specific information is currently available about the character of either the unconsolidated materials or the bedrock. However, Berg and Kempton have used data from the Illinois State Geological Survey's extensive collection of well logs to prepare a series of maps which generally indicate the probable occurrence of sediments and/or bedrock within the interval from the surface to 50 feet in depth (Berg and Kempton, 1988). They indicate a probability of over 20 feet of predominantly silty, clayey till over Silurian and Devonian bedrock, mainly dolomite. The bedrock surface is expected to be between 20 and 50 feet below ground surface (Berg and Kempton, 1988).

Based on geologic mapping data gathered by the Illinois State Geological Survey, Berg and others prepared a series of maps evaluating the potential for hazardous substances released at the surface to migrate into the first subjacent water-producing zone (Berg et al., 1984). For the vicinity of the American National facility, they deem the migration potential to be relatively low, because of the probable presence of

a surficial unit of uniform, relatively impermeable material at least 20 feet thick, and no evidence of interbedded sand or gravel.

2.6.4 Groundwater

No site-specific hydrogeologic information is currently available. Therefore, no statements may be made regarding the depth to the water table, ground-water flow rates or directions, or the stratigraphic position of aquifers beneath the facility.

In the northeastern Illinois region, groundwater is obtained from four major aquifer systems--the glacial drift system, the shallow bedrock system, and two deep bedrock systems. They are distinguished by their hydrologic properties and recharge source areas (Hughes et al., 1966). In central Cook County, the glacial drift is thin, and sand and gravel deposits are correspondingly thin or absent. Virtually all wells penetrate deep bedrock aquifers (Bergstrom et al., 1985).

The shallow bedrock aquifer system in northeastern Illinois underlies the glacial drift system and is mainly comprised of Silurian dolomite formations. The upper boundary of this system is the bedrock-drift contact, and the lower boundary is the Upper Ordovician Maquoketa Shale. Water from this aquifer is obtained from fractures and solution openings in the Silurian dolomite beds (Hughes et al., 1966). The shallow bedrock aquifer system receives some recharge locally from precipitation (Hughes et al., 1966).

Deep bedrock aquifer systems include the Cambrian-Ordovician aquifer system and the Mt. Simon aquifer system (Hughes et al., 1966). The Cambrian-Ordovician aquifer system contains two major aquifers--the Glenwood-St. Peter aquifer and the Ironton-Galesville aquifer. The top of the Cambrian-Ordovician aquifer system is the Galena-Platteville Dolomite. The Glenwood-St. Peter aquifer is widely utilized where water requirements are less than 200 gallons per minute. This unit has a hydraulic conductivity between nine and 15 gallons per day per square foot (gpd/sq.ft.). The Ironton-Galesville Sandstone aquifer has a hydraulic conductivity between 30 and 40 gpd/sq.ft. Recharge to the deep bedrock aquifer systems is mostly from west and north of the six-county metropolitan area, where rocks crop out at the surface or lie immediately below the glacial drift. Minor recharge occurs as leakage through the shallow bedrock aquifer system (Hughes et al., 1966).

The Mt. Simon aquifer system is bounded above by the relatively impermeable shales and siltstones of the upper and middle Eau Claire Formation, and below by pre-Cambrian basement rock. The average

hydraulic conductivity of the aquifer system is 16 gpd/sq.ft. (Hughes et al., 1966) and recharge is largely from the outcrop region of Cambrian rocks in central-southern Wisconsin (Willman, 1971).

2.7 RECEPTORS

The American National facility occupies less than three acres in an industrial and residential mixed use area in Bellwood, Illinois. Bellwood has a population of about 19,800 people.

The American National facility is bordered on the north by Maywood Drive and two tracks of the Chicago and Northwestern Railroad, on the west by Sleepeck Printers, on the south by an Indiana Harbor Belt railway spur and residential homes, and on the east by a Handy Andy warehouse. The nearest school, Wilson Elementary, is located less than 0.5 mile south of the facility. Facility access is controlled by chain link fencing around part of the facility property. Gates on the east and west sides of the facility are the only means of access to the rear parking lot. The east gate (across the one-way drive into the parking lot) is open from 7:00 to 7:30 a.m. and from 3:30 to 4:30 p.m. It is controlled with automated gate closing and employees must use a card to open it. The building is always locked and is equipped with an alarm system. Employees and visitors access the building through a rear entrance. ADT Security Systems is used to monitor for burglary, fumes, and fires.

The nearest surface water body, Addison Creek, is located less than 0.5 mile west of the facility and appears to be used only for surface drainage. No public water supply intakes are known to exist on Addison Creek or the Des Plaines River in Cook or DuPage County (McConkey, 1992)

Groundwater is not used at this facility as a water supply. The nearest municipal drinking water well is located approximately 0.5 mile west of the facility (Banaszek, 1992). The local groundwater gradient is not known. The Village of Bellwood plans to hook up to the City of Chicago water system sometime during the summer of 1992 (Banaszek, 1992). When the link to the Chicago system is complete, Bellwood will discontinue pumping from their four active wells (Banaszek, 1992).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the seven SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and BVWST observations.

SWMU 1

Plate Processing Area

Unit Description:

The plate processing area is located indoors in the northwestern part of the building. This unit is where the bi-metal etching process occurs. The unit measures approximately 42 feet by 60 feet. Wastes are placed in color-coded drums as they are generated. The drums remain sealed on the concrete floor (see Photograph No. 1). No drains are located in the area.

Date of Startup:

This unit began operation when the facility began operations in 1959.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages spent etch (D002), which is 95% ferric nitrate; etching rinse water, mostly water with copper; spent developer, containing 40% diethylene glycol ethyl ether and 60% gamma butyrolactone; and spent stencil remover, containing less than five percent sulfuric acid, phosphoric acid, and ferric nitrate. When a drum is full or before 90 days, it is dated and moved to the drum storage area. A total of approximately ten drums of waste are generated every 90 days in the plate processing area.

Release Controls:

This unit has no release controls and no floor drains are in the area.

History of Documented Releases:

No releases from this SWMU have been documented.

Observations:

This unit contains process machinery, including photocomposing machines for engraving, etching and the manufacture of printing plates. Two drums were temporarily staged in this area. These drums were sealed, color

coded, and in good condition. The concrete floor was in good condition with no visible cracks. No evidence of release was noted.

SWMU 2

Alcohol Washout Units

Unit Description:

Two alcohol washout units are located next to each other, indoors, aboveground, along the west wall of the Nyloprint ® room, which is west of the plate processing room. These units wash soluble polymer from the printing plates after they have been exposed to high intensity UV light, leaving hardened polymer as the final printing image. These units each measure 49 inches by 60 inches by 35.5 inches and have a capacity of approximately 50 gallons (see Photograph No. 2). They are stainless steel structures that are operated using the control panels attached to the right sides of each. These units lie on a concrete floor in good condition. No floor drains are located in the area, and the Nyloprint ® process room is self-contained with approximately six-inch-high concrete berms across each entry door threshold.

Date of Startup:

These units were granted an operation permit on March 30, 1979.

Date of Closure:

These units are active.

Wastes Managed:

These units manage photopolymer and recyclable ethyl alcohol. Ethyl alcohol and waste photopolymer from these units are transferred to the still unit for separation. Wastes are transferred through overhead, steel piping.

Release Controls:

The base of each unit is an approximately four-inch-deep metal tray, designed to contain drippings from the unit. The Nyloprint ® process room is self-contained with a sound concrete floor, no floordrain, and an approximately six-inch-high concrete berm under the threshold of each entry door. These units feature an on/off switch, timer, thermometer, pressure gauge, and emergency stop.

History of Documented
Release:

No releases from this SWMU have been documented.

Observations:

These units are in good condition, but were not operating during the PA/VSL. The steel trays around each unit appeared to be in good condition. Some residue was on the concrete floor outside of the trays, but the floor was in good condition with no visible cracks. No evidence of release was noted.

SWMU 3

Still Unit

Unit Description:

The still unit is located indoors, aboveground, north of and next to the alcohol washout units in the Nyloprint ® room. This unit is only about three feet north of the alcohol washout units. The still unit reclaims the ethyl alcohol from the soluble photopolymer for reuse. The unit measures 50 inches by 31.5 inches by 45.5 inches and has a 59-gallon capacity regeneration unit, plus a storage tank with pump to hold 132 gallons of regenerated ethyl alcohol. The unit is made of stainless steel (see Photograph No. 3). No drains are located in the area.

Date of Startup:

This unit was granted an operation permit on March 30, 1979.

Date of Closure:

This unit is active.

Wastes Managed:

This unit reclaims ethyl alcohol and manages waste photopolymer. The alcohol is reused in the washout units. The photopolymer forms a sludge and is poured from an attached faucet into five-gallon cubitainers (lined cardboard boxes). After the sludge solidifies (within 48 to 72 hours), the cubitainers are disposed of in the general refuse dumpster. General refuse generated at the facility is landfilled by Van Ryan Scavenger Service.

Release Controls:

The base of the still unit is an approximately four-inch-deep metal tray, designed to contain drippings from the unit. The Nyloprint ® process room is self-contained with a sound concrete floor, no floor drain, and an approximately six-inch-high concrete berm under the threshold of each

entry door." Empty cubitainers are placed on a sheet of wood covering the floor beneath the still unit's faucet. The photopolymer sludge is allowed to solidify in the cubitainers and then are discarded in the general refuse dumpster.

**History of Documented
Release:**

No releases from this SWMU have been documented.

Observations:

This unit is in good condition, but was not operating during the PA/VSI. The steel tray around this unit appeared to be in good condition. A cubitainer, apparently full of the photopolymer sludge, was staged under the faucet. Stains were evident on the concrete just off of the wooden sheet, but the floor was in good condition with no visible cracks. No evidence of a release was noted.

SWMU 4

Drum Storage Area

Unit Description:

The drum storage area is located above ground, indoors, in the northwestern part of the building. The unit is adjacent to a truck loading dock, north of the Nyloprint ® room and plate processing area. This unit is used to store virgin material and waste drums from the plate processing area. Virgin material is stored in drums and containers, on the floor and on shelves along the western wall of the room. Waste drums are stored along the eastern wall. All drums are grounded. This unit measures 10 feet 8 inches by 25 feet 4 inches with a floor to ceiling height of 9 feet 11 inches (see Photograph No. 4). This unit has brick walls and an eight-inch-thick concrete floor. Windows are in the northeast walls. No drains are located in this area. The room has explosion proof lighting, and is ventilated by an explosion proof exhaust fan above the only door on the south end of the room.

Date of Startup:

Before 1986, this unit may have been used to store wastes temporarily; since 1986, the room has been used to store drummed wastes and virgin materials.

Date of Closure: This unit underwent RCRA closure on August 26, 1986. The unit is currently used to store wastes for less-than-90-days.

Wastes Managed: This unit manages spent etch (D002), which is 95% ferric nitrate; etching rinse water, mostly water with an undetermined concentration of copper in solution; spent developer, containing 40% diethylene glycol ethyl ether and 60% gamma butyrolactone; and spent stencil remover, containing less than five percent sulfuric acid, phosphoric acid, and ferric nitrate. Drums from the plate processing area are moved to this unit. Spent etch (D002) and etching rinse water are shipped to Enviro in Harvey, Illinois for recycling (IEPA, 1989). Spent developer and spent stencil remover are ultimately reclaimed by Printing Development Inc. in Racine, Wisconsin. All these wastes are transported by Hazmat Environmental Group.

Release Controls: No floor drains are in the area. The concrete floor appears to be in sound condition. Entry into the room is made through a door on the south end. The threshold of this door is on top of an approximately six-inch-high concrete berm, which is designed to contain potential releases in the room. This unit has explosion-proof lighting and an exhaust fan over the door at the southern end of the room. All metal drums of virgin materials and waste are grounded.

History of Documented Release: No releases from this SWMU have been documented.

Observations: This unit contained virgin material in drums and containers along the western wall. Nine drums were staged along the eastern wall, in that part of the room designated for waste storage. A yellow steel cabinet along the northern wall contains virgin material and drum/product handling tools. None of the drums or containers showed signs of rust or corrosion. Except for hand pumps installed in the bung hole of some drums containing virgin materials, all drums and containers were sealed. No cracks were observed in the concrete floor. The floor was clean and free of any debris or stains. No evidence of release was noted.

SWMU 5**Former Tank Storage Units****Unit Description:**

The tank storage units were located underground, outdoors, beneath the asphalt parking lot at the southern end of the facility. The units consisted of two 4,000-gallon underground storage tanks. Each of the cylindrical tanks were constructed of fiberglass and were 8 feet in diameter by 14 feet long. These tanks were used to contain wastes generated at the facility.

Date of Startup:

This unit began operation in November 1980.

Date of Closure:

This unit was deactivated in January 1985 and has undergone RCRA closure. Both tanks were disconnected from piping, rinsed, and filled with water on August 26, 1986. In January 1990 both tanks were removed and transported to Wheeling Disposal in Wheeling, Illinois. On November 14, 1990, the IEPA approved American National's request to withdraw the facility's RCRA Part A permit application.

Wastes Managed:

This unit managed HCL (D002) and nitric acid (D002).

Release Controls:

The unit has been removed.

History of Documented Release:

No releases from this SWMU have been documented.

Observations:

An asphalt parking lot covers the former location of this unit (see Photograph no. 5).

SWMU 6**Former Overspill Tank****Unit Description:**

The former overspill tank was a spill collection basin connected to the drum storage area by a three-inch diameter pipe. The container was constructed of concrete on all sides except the floor, which was soil. Approximately 3 feet 2 inches in diameter and 5 feet 4 inches long, the container was located underground north of the main building on the east side of the loading dock driveway.

Date of Startup:	This unit was installed in 1959.
Date of Closure:	Cleaned and disconnected from piping in 1989. The unit was removed in January 1990. Formal RCRA closure was approved November 14, 1990.
Wastes Managed:	No wastes were managed in this unit.
Release Controls:	This unit has been removed.
History of Documented Release:	No releases from the SWMU have been documented. Facility representatives state that no releases from the drum storage area to this SWMU have been documented.
Observations:	A grass lawn covers the former location of this unit (see Photograph No. 6).
SWMU 7	Former Incinerator
Unit Description:	Manufactured by McNaulin, Inc., the incinerator was a Vulcanor IF-125 equipped with two gas burners. The unit had primary and secondary combustion chambers, rated at 170,000 and 185,000 British Thermal Units/hour, respectively.
Date of Startup:	This unit was installed in 1959. Facility representatives believe it began operating that same year.
Date of Closure:	This unit ceased operating sometime between 1977 and May 1979.
Wastes Managed:	This unit managed paper towel wipes used to clean printing plates and process equipment, and general plant garbage.
Release Controls:	The unit has been removed.

History of Documented
Release:

No releases from this SWMU have been documented.

Observations:

The area where the former incinerator was located was not observed during the PA/VSI. The incinerator was removed on May 1, 1979.

4.0 AREAS OF CONCERN

BVWST identified no AOCs during the PA/VSI.

4 PAGES REDACTED

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ATTACHMENT A

EPA PRELIMINARY ASSESSMENT FORM 2070-12



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER ILD 005 142 351

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) American National Can Company	02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER 2400 Maywood Drive				
03 CITY Bellwood	04 STATE IL	05 ZIP CODE 60104	06 COUNTY Cook	07 COUNTY CODE	08 CONG DIST
09 COORDINATES: LATITUDE 41° 52' 38" N	LONGITUDE 87° 51' 55" W				
10 DIRECTIONS TO SITE (Starting from nearest public road) From the Eisenhower Expressway (I290) proceed north on 25th Street approximately three-eighths of a mile to Maywood Drive, turn east and proceed one block to 2400 Maywood Drive.					

III. RESPONSIBLE PARTIES

01 OWNER (if known) American National Can Company	02 STREET (Business, mailing, residential) 8770 West Bryn Mawr		
03 CITY Chicago	04 STATE IL	05 ZIP CODE 60631	06 TELEPHONE NUMBER (708) 399-3000
07 OPERATOR (if known and different from owner) American National Can Company	08 STREET (Business, mailing, residential) 2400 Maywood Drive		
09 CITY Bellwood	10 STATE IL	11 ZIP CODE 60104	12 TELEPHONE NUMBER (708) 544-4414
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: (Agency Name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER (Specify) <input type="checkbox"/> G. UNKNOWN			
14. OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input checked="" type="checkbox"/> A. RCRA 3010 DATE RECEIVED: 08/04/80 MONTH DAY YEAR <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103 d) DATE RECEIVED: / / MONTH DAY YEAR <input type="checkbox"/> C. NONE			

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 01/10/92 <input type="checkbox"/> NO	BY (Check all that apply) <input checked="" type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: (Specify) CONTRACTOR NAME(S): B&V Waste Science and Technology Corp.
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN	03 YEARS OF OPERATION 1959 / Present BEGINNING YEAR ENDING YEAR <input type="checkbox"/> UNKNOWN
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED Spent etch (D002) 95% ferric nitrate, etching rinse water contains copper in solution, spent developer contains 40% diethylene glycol ethyl ether (carbitol), and 60% gamma butyrolgetone (organic solvent), and copper sensitizer/stencil remover contains less than five percent each of sulfuric acid, phosphoric acid, and ferric nitrate.	
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION No documented releases. Potential for release to ground water, surface water, soil, or air is low. Site is controlled by fencing and a security system.	

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.) <input type="checkbox"/> A. HIGH (Inspection required promptly) <input type="checkbox"/> B. MEDIUM (Inspection required) <input type="checkbox"/> C. LOW (Inspect on time-available basis) <input checked="" type="checkbox"/> D. NONE (No further action needed; complete current disposition form)			
---	--	--	--

VI. INFORMATION AVAILABLE FROM

01 CONTACT Kevin Pierard	02 OF (Agency/Organization) U.S. EPA	03 TELEPHONE NUMBER (312) 886-4448		
04 PERSON RESPONSIBLE FOR ASSESSMENT John P. Chitwood	05 AGENCY	06 ORGANIZATION BVWST	07 TELEPHONE NUMBER (312) 346-3775	08 DATE 06/09/92 MONTH DAY YEAR

ATTACHMENT B

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

American National Can Company
2400 Maywood, Bellwood, Illinois
ILD 005 142 351

Date: January 10, 1992

Facility Representatives: Judith Peters, Manager, Environmental Engineering, American National Can Company
James M. Young, Manager, Graphic Arts Center, American National Can Company
Robert B. Reitsma, Manager, Production Control, Graphic Arts Center, American National Can Company

Inspection Team: Tim Moody, B&V Waste Science and Technology Corp.
John Chitwood, B&V Waste Science and Technology Corp.

Photographer: Tim Moody, B&V Waste Science and Technology Corp.

Weather Conditions: Sunny to partly cloudy, temperature in mid-30's (°F).

Summary of Activities: The BVWST inspection team met with facility representatives at approximately 9:15 a.m. Approximately one hour was spent in Mr. Young's office discussing facility operations. At approximately 10:15 a.m., facility representatives led a tour of the facility for the inspection team. All potential SWMUs were observed with the exception of the location of the former incinerator. At the time of the VSI, the former incinerator was not considered a SWMU by the inspection team. The inspection was concluded at 11:15 a.m.



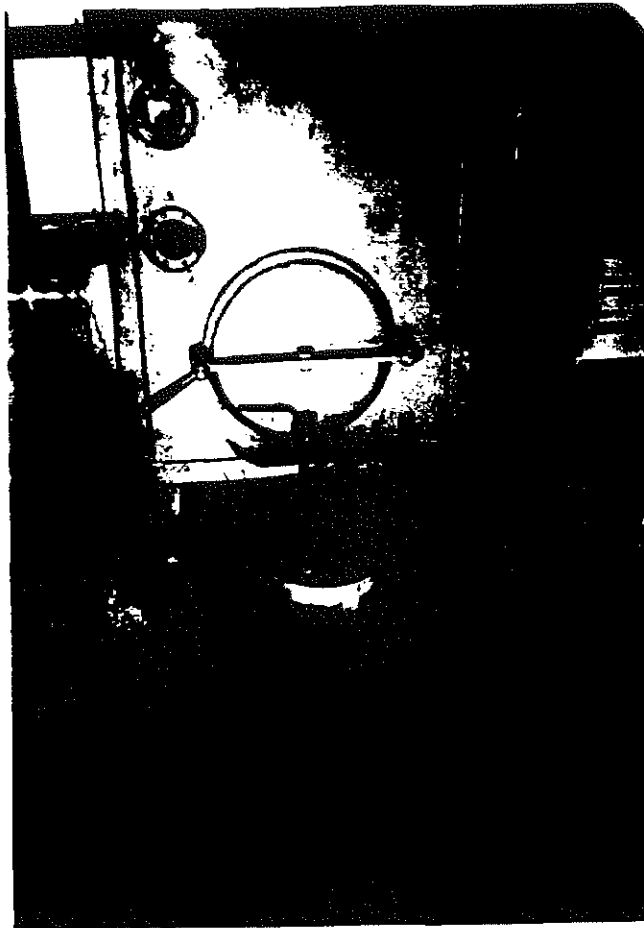
Photograph No. 1
 Orientation: West
 Description: Waste drums in plate processing area (SWMU 1).

Location: Plate Processing Area
 Date: January 10, 1992



Photograph No. 2
 Orientation: North
 Description: Alcohol washout units (SWMU 2) in foreground and middleground of photograph. Note containment barriers on floor around the base of each unit.

Location: Nyloprint R Room
 Date: January 10, 1992



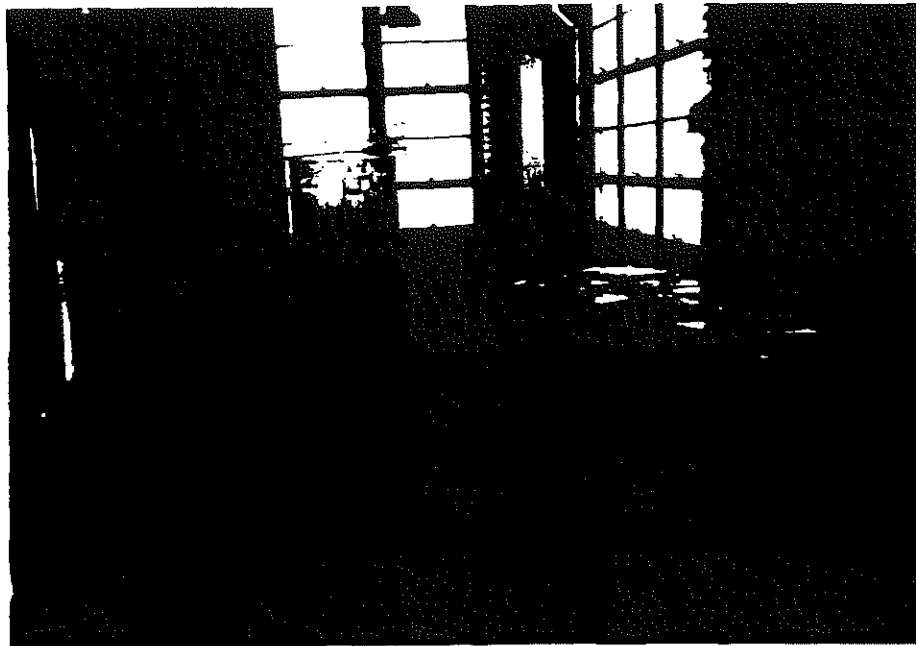
Photograph No. 3

Orientation: West

Location: Nyloprint 36 Room

Date: January 10, 1992

Description: Front of still unit (SWMU 3) with previously filled cubitainer. The cubitainer rests on a plywood sheet. Solidified photopolymer coats the floor just left of the plywood.



Photograph No. 4

Location: Drum Storage Area

Orientation: North

Date: January 10, 1992

Description: Drum storage area (SWMU 4). Grounded metal drums containing process waste are stored along the east (right) wall. Virgin material is stored in drums and containers along the west (left) wall.



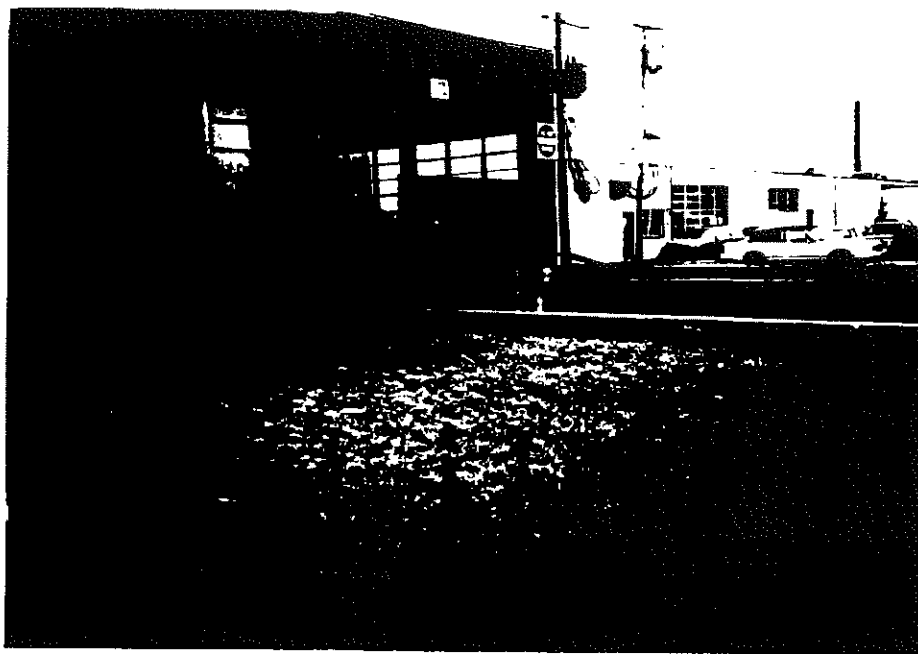
Photograph No. 5

Location: Parking lot behind building

Orientation: Northwest

Date: January 10, 1992

Description: General area where underground tank storage units (SWMU 5) were located.



Photograph No. 6

Location: Northwest corner of site

Orientation: Southwest

Date: January 10, 1992

Description: Former overspill tank (SWMU 6) was located in grassy area in middle right of photograph, adjacent to driveway retaining wall. Drum storage area (SWMU 4) is behind large window left (east) of garage door

ATTACHMENT C
VISUAL SITE INSPECTION FIELD NOTES

American National Can-Bellwood Facility
Visual Site Inspection

10 JAN 1992

Tim Moody
John Chitwood

BLV Waste Science and Technology
101 N Wacker Dr. Suite 1100
Chicago, IL 60606
(312) 346-3725

Tim Hardy

1/10/92

2

Tim Hardy 1/10/92

3

John Woodward and
Tim Hardy arrived
at American National
Gym in Ballerwood at
7:30 a.m., Friday,
January 10, 1992.
A meeting began
in the production office
of James H. Young, Jr.,
Manager of the graphic
facility's printing and
reproduction. He, along
with Judy Peters,
Manager of environmental
design and project
management, Manager
of production, control of
the graphic arts
center, were present.

~~Tim Hardy~~

Tim Hardy 1/10/92

Tim Hardy 1/10/92

Jim Moody 1/10/92

4



5

Jim Moody 1/10/92

The outside weather is
30s w scattered clouds.

Please refer all
questions through
Judith Peters.

Printing was done by
engraving on a stone.
HNC doesn't do it
in thought of terms of
it's an artwork.

Massive printing
means taking artwork to
create finished plates

To make printing plates
for ANC - I don't print
the images themselves -
make the plates &
ship them

Film comes in rolls
form film - is photograph
exposed to plate & plate
is then shipped to
factory to print
by H. 1/10/92

by H. 1/10/92

Jim Moody 1/10/92

~~Jim Moody 1/10/92~~

Jim Moody 1/10/92

Jim Moody 1/10/92

Have machines to
expose & process film →
three are running.

Does through film exposure
unit → exposes ap
plate in light onto
plate → light takes
photopolimer → placed
in development machine
& prints image.

W. M. Develop in process machine
→ at one time processed

Don't know about
hydrochloric acid use.

Only solid waste

is washing away
photopolymers from plates. Create
a form of polymer
nylon in light →

Jim Moody 1/10/92

8



~~Jim Moody 1/10/92~~

Jim Moody 1/10/92

Jim Moody 1/10/92

9

7 volume portions captured

as solid wastes

→ this is the only

process generating

wastes

A couple methods

give a competitive

advantage that can't

take pictures of → non-

hazardous producing

It is collected

into cardboard boxes

containers (5 gal) →

cardboard box a/choice

These are

landfilled → by Vanrym

as regular garbage

disposal → not separate

from other garbage

W.M.

Approx. 10 ideas

shown, much a month

disposed of

W.M. 1/10/92

Jim Woody

1/10/92

10

Jim Woody 1/10/92 "
Analyzed info. in
Closure Certification
Statement document
of IEPA's.

Spill tank/catch basin

Everything was cleaned to
IEPA's standards

Discovered a dry well
w/in a tank

Slating in Aug. '89 through
long period of time
(Chad removed)

Closure Report documents
activities by day

J. M. 1/10/92

J. M. 1/10/92

J. M. 1/10/92

J. M. 1/10/92

~~St. M. Murphy 1/10/92~~

12

St. M. Murphy 1/10/92
13
Wastes generated

Spent Etch (ex?) - (from TEPA
summary) → incinerated
developed, etched an
plate of chemical
material → has been
of composition of
chemical

Spent Cations → will
store as documentation
in then

no longer have incinerator
→ since 1970-70s
→ no longer
generate paper towel
waste

~~St. M. 1/10/92~~

St. M. 1/10/92

St. M. 1/10/92

Wm. Moody

1/10/92

14

Wm. Moody 1/10/92 15

Permits

One W. M. 1/10/92

Have air permit → then
only one for facility

Facility

1987 ~~the~~ the emerging

of two cos. →
transfers of ownership
→ firm. Can produce
decane. ~~substant~~
subsidiary

→ facility constructed
in 1989 as American
Can → same function
then (different tech.)

- welding is
40,000 sq. ft.

- found 10 days than 30 days
- 62 employees

W. M. 1/10/92

W. M. 1/10/92

W. M.

W. M. 1/10/92

~~Jim Moody~~

~~1/10/92~~

16

Jim Moody 1/10/92 17

- gate
- complete PDT sys hooked into burglar alarm fire...
- automated gate closing
- emergency ~~button~~ employees has to use card after gate closed
- hourly employees clock in & out
- gate open 7 - 730 & 330 - 430
- always always closed
- alarm sys.
- operating 730 - 8pm. Main - Fire.
- sometimes override
- used during part of schedule

~~Jim. 1/10/92~~

Jim. 1/10/92

Jim. 1/10/92

Jim Moody 1/10/92

Jim Moody 1/10/92

Blagn in 2 locations
front: engineering dept
back: plant

22.11.11

220 film processing
units replaced by
set of 3-yr. plan
by computer

Ammonia is consumed
& replenished ->
not used disposed of
-> there self-contained
system

color control ->
inc chlorating
material

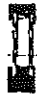
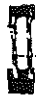
22.11.11 1/10/92

22.11.11 1/10/92

22.11.11 1/10/92

Jim Moody 1/10/92

20



~~Dr. M. 1/10/92~~

Dr. M. 1/10/92

Jim Moody 1/10/92²¹
Sometimes have to make
a proof on the metal
→ apply ink to metal
(steel) plate

Plate Room

Photocomposing machines
(cameras) → film placed
in window
→ once polymerized,
can't work off
→ use alcohol plate,
(getting alcohol) → recycle
it

Water-wash devel.
plate → prevent fingerprint
→ desirable to
drown in water

After plate is exposed,
processor

customer → send
Dr. M. 1/10/92

Jim Moody

1/10/92

22-

plate process

Jim Moody 1/10/92
soluble in alcohol

in process, process
in 6-8 minutes.
whole worn down,
trays under all
equipment, concrete
floor.

alcohol recirculate
into still, sludge coming
up on bottom, alcohol
goes into agitators,
put into dumpsters

scrubbed with printing
plate -> photo.

open through decontam.
(same process recently)

printing equipment

printing machine in
Raguna, WI -> supplies

and various drums
(plastic, 55-gal.)

Dr. M.

1/10/92

Dr. M. 1/10/92

Dr. M. 1/10/92

Jim Moody 1/10/92

24

Jim Moody 1/10/92 25

Jim storage room.
mops, sodium ash, face
shield, pig spill, face
→ store them before
pick up → every 10 days
approx. 4/8

Use same drums →
never extra ones
to dispose of

Explosion - proof lighting

No longer a drain

Hot water is only
water & copper.

In polymer room, received
decayed & put into containers

~~Dr. M. 1/10/92~~

Dr. M. 1/10/92

~~Dr. M. 1/10/92~~

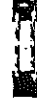
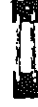
Dr. M. 1/10/92

~~Jim Moody 1/10/92~~

~~by J.M. 1/10/92~~

~~by J.M. 1/10/92~~

26



Jim Moody 1/10/92 27
Sleepers. Printers

Handy Arts Warehouse
Tutor a couple miles

Washington elem.
school.

Belwood city water
W.M. → given to
Metro. Recba.

Inspection concluded
at 11:02 a.m.

~~by J.M. 1/10/92~~

~~by J.M. 1/10/92~~

Dr. Massey 1/10/92 28

Dr. Massey 1/10/92 29

Photo locations

Photo 1 10²⁰ a.m. Alcohol
Wash liquid - plates

are wrapped in
wetted alcohol. Note
metal containing
structure in placard
above of Unit. View.

Photo 2 10²⁵ a.m. Still Unit -
Alcohol / photo - polymer
solvent is distilled,
separative alcohol from
polymer - phenol sludge,
which solidifies in
approximately 1/8-72
hours. Wet view.

Photo 3 10³⁰ a.m. Waste
drums in photo process
room. Wet view.

Dr. Massey 1/10/92-

Dr. Massey 1/10/92-

Jim Moody 1/10/92

~~Jim Moody 1/10/92~~

Jim Moody 1/10/92

30

Jim Moody 1/10/92 31

Photo 4 10:35 a.m. - Down
wedge road
March view

Photo 5 10:40 a.m. - W.M.
corner of facility where
dum waste area
spill tank was
formerly located.

Photo 6 11:00 a.m. - former
VST area in rear
parking lot. View

Photo 7 11:02 a.m. - former
VST area in rear
parking lot. West
view.

~~Jim Moody 1/10/92~~

Jim Moody 1/10/92